

# Meet the Ember // A MicroPenthouse

## Changing the Future of the Residential Housing Market and Rekindling Passion for Living

By THE FOUNDERS Oct. 20, 2016



Outdoor Lounge and Entry at Dusk

### Meeting the Needs of a New Generation

Meet the Ember, a micropenthouse that is breaking into the residential market as “the ultimate smart house of the future” at the intersection of penthouse luxury, tiny house economy and integrated technology.

“We wanted to design a home that met every need we could possibly think of as representatives of the next generation of buyers - needs for spatial flexibility, autonomous mobility, energy efficiency, connection to nature and the outdoors, innovative technology integration, human interaction and accessibility. We wanted to create a beautiful and elegant forever home that you could fall in love with and would be a cherished part of your family and a source of pride for the community, locally and globally.” - Emily Bisaga Dunne, MicroPenthouse Founder



A Trailer Base Provides Opportunity for Mobility



Living Wall for Natural Connection

## Forward-thinking Design Styling

The Ember design consists of a 150 SF floor plate with 250 SF indoor living area and 600 SF outdoor living area for a combined total of 850 SF usable space. Incredibly, this amount of room provides sleeping for six, indoor dining for two, outdoor dining for six, indoor and outdoor showers, an indoor-outdoor gas fireplace, and indoor-outdoor luxury lounge, al fresco and tapas dining and a full modern kitchen. How did they do it?

“The Ember takes style queues from commercial towers, penthouse designs, luxury dining establishments, legacy hotel lobbies and lounges, micro kitchens, treehouses, and cruise ships. The fusions of these worlds create seamless spaces with grand functions and gorgeous finishes that produce euphoric experiences for the occupant.” - Emily Bisaga Dunne, MicroPenthouse Founder



Indoor Lounge



Sleeping Loft



Solar Panels for Energy Savings



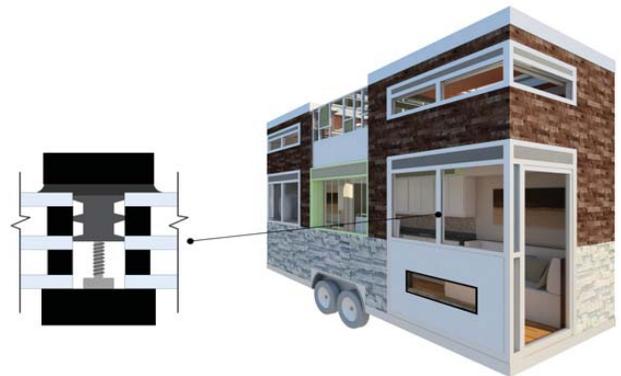
## Sustainability Driving Design Excellence

Beyond good looks, the Ember also boasts a litany of sustainable design features. Out of the box thinking informed the integration of solar panels, passive heating and cooling, natural ventilation, passive house curtain wall systems, SIPs envelope design, water-saving technology, low-flow water closets, seamless heating and cooling systems, eco-friendly lighting, no VOC, and locally sourced materials and a rainwater collection system.

“When we started working on this project, we decided that green design was more than a buzz word for the Ember; Green design was an actual driving force behind major system development decisions. We searched for every opportunity we could find to include passive and active solutions that would save money and provide good health for the owner while utilizing local environmental resources responsibly.” - Walter Bisaga Dunne, MicroPenthouse Founder



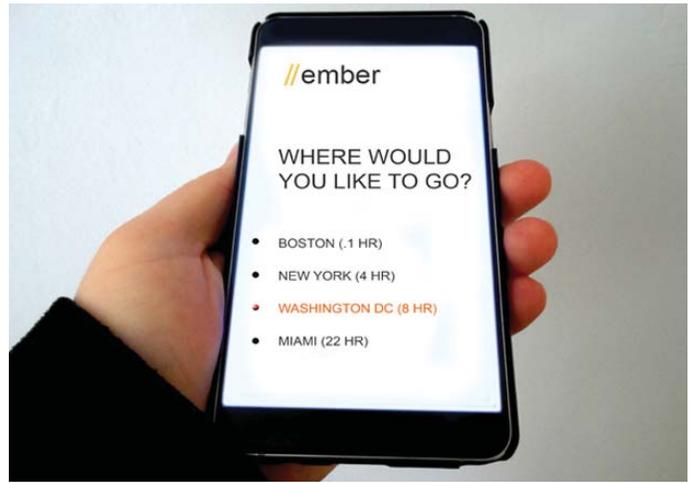
Living Walls as Panels in Curtain System



Passive House Glass for Efficient Insulation



Trailer Hookup



Ember App

## All of the Technology // Ready for Autonomy

Technology in the Ember serves to assist sustainable design through advanced systems performance analysis and also provides a variety of innovative solutions for modern living. The custom trailer base design automatically hooks up with a vehicle featuring autonomous mobility for hands-free, cross-country travel. While you are on the road or occupying a site in a MicroCommunity, use your smartphone to set future navigation routes, control heating and cooling, control lighting and shading, control fireplace and music speaker settings, adjust the ladders to the lofts, operate doors and windows and access your local server to store your photos, videos within the Ember.

“We worked together to understand how systems and technology could all operate for the benefit of one another. We looked at innovative material technology, hardware for data storage, wireless speaker technology, application development opportunities and remote control operations for actions that were previously mechanical within the Ember.” - Walter Bisaga Dunne, MicroPenthouse Founder



How Would You Like to Travel in 2020?



EMILY BISAGA DUNNE

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A Design Technologist with a passion for connecting people through forward-thinking design

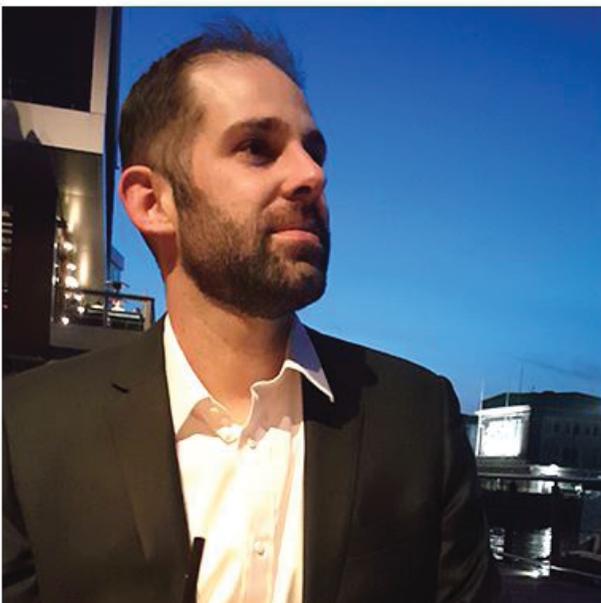
— **The Idealist**

### An Uncommon Team Produces an Innovative Design Concept

For the team of two, the year-long process was about a dialogue between a Design Technologist and a Mechanic with two wildly different design approaches. Emily focused on the Ember through a lens of user experience and high-level concept design while Walter worked out the details of functionality and efficiency. The Ember demonstrates the results of a balanced approach toward design development where all aspects from concept to detailing are considered with equal importance and inform one another in a collaborative work environment.

To produce the actual content for the Ember, Emily and Walter used a variety of software applications such as Autodesk FormIt for massing studies, Autodesk Revit LT Version 2016 for a design development model, Autodesk 360 Cloud services for rendering and stereoscopic views, Windows Movie Maker for a simple video and the monthly subscription Adobe Suite for image editing. Virtual Reality was critical in visualizing tiny spaces.

“We’re so fortunate to live in an era where extraordinarily powerful software applications have scaled down their products and pricing so that individuals can afford to independently produce works like the Ember. If you ever wanted to create a legacy design with premier personal computer programs, now is the time.” - Emily Bisaga Dunne, MicroPenthouse Founder

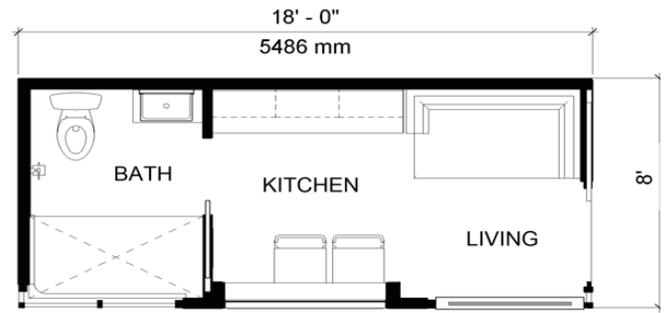


WALTER BISAGA DUNNE

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A Mechanic who approaches everything from a detail-oriented and functional perspective

— **The Realist**



The Future of Residential Housing

Floor Plan

## A Vision of MicroPenthouses Locally and Globally

Now that the design phase for the Ember is complete, where will the micropenthouse movement go next?

“Next we are focusing on exhibiting our work. We are already scheduling speaking engagements at universities on the East Coast. We hope that major news sources will pick up this story and that the micropenthouse movement will reach across cultural boundaries to connect people through design. We’re going to show the Ember to the world. We would also like to secure funding for a prototype of the Ember in 2017 and we would like to see the Ember reach the market for production by 2020.” -Walter Bisaga Dunne, MicroPenthouse Founder

# // mission

## LAUNCH THE **EMBER**

### PROVIDE THE NEXT GENERATION OF HOUSING

- Phase I: Complete construction documents for the Ember (Est. \$200,000)
- Phase II: Complete schematic design, design development and version release of applications (Est. \$800,000)
- Phase III: Complete fabrication of MEP and structural systems (Est. \$800,000)
- Phase IV: Build a prototype of the Ember for showcase, research and development (Est. \$500,000)
- Phase V: Release the Ember to market (Est. \$200,000)

If you would like more information on the Ember or you would like to fund this project:  
visit [www.micropenthouse.com](http://www.micropenthouse.com)

If you would like to contact Emily and Walter directly:  
email [info@micropenthouse.com](mailto:info@micropenthouse.com)